

4C. INJURIES IN NONMETAL MINING

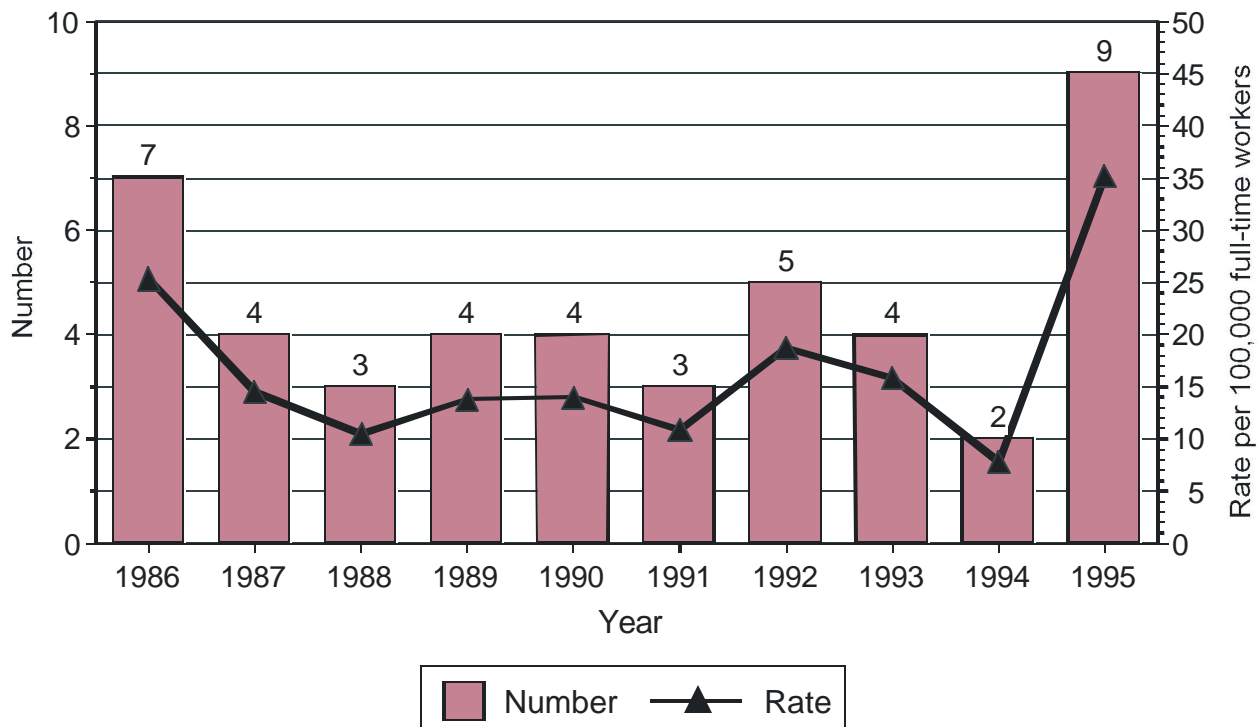


Figure 4C-1.—Nonmetal operators: number and rate (per 100,000 workers) of fatal injuries by year, 1986-1995.
(Source: MSHA data)

Table 4C-1.—Nonmetal operators: number and average annual rate (per 100,000

<u>Mining operation</u>	<u>Number, 1986-1995</u>	<u>Average annual rate per 100,000 full-time workers</u>
Underground mines:		
Underground operations	16	45.4
Surface operations	0	*
Surface mines:		
Strip	17	28
Dredge	0	*
Other surface mining	0	*
Independent shops/yards	0	0
Mill	12	7.1
Office	0	*
Total	45	14.3

* Rate not calculated because there were fewer than 3 fatalities

Source: Mine Safety and Health Administration data.

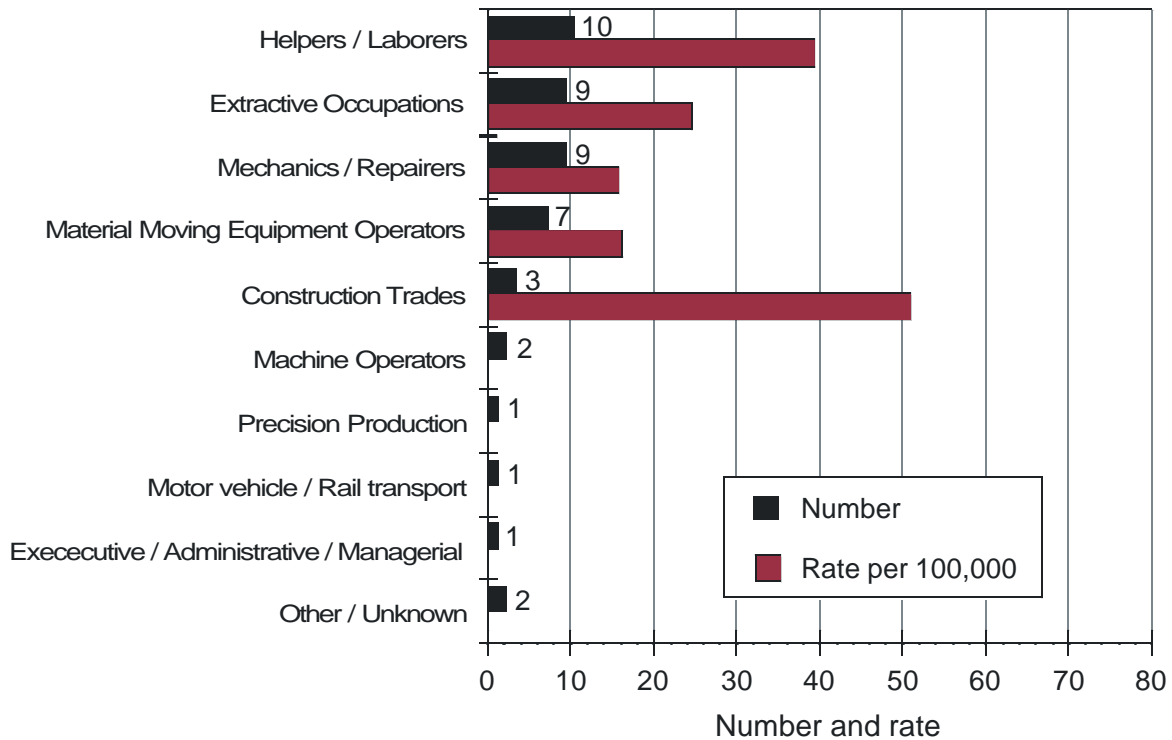


Figure 4C-2.—Nonmetal operators: number and rate (per 100,000 workers) of fatal injuries by U.S. Bureau of the Census Occupation Division, 1986-1995. (Source: MSHA data)

workers) of fatal injuries by subunit, 1986-1995.

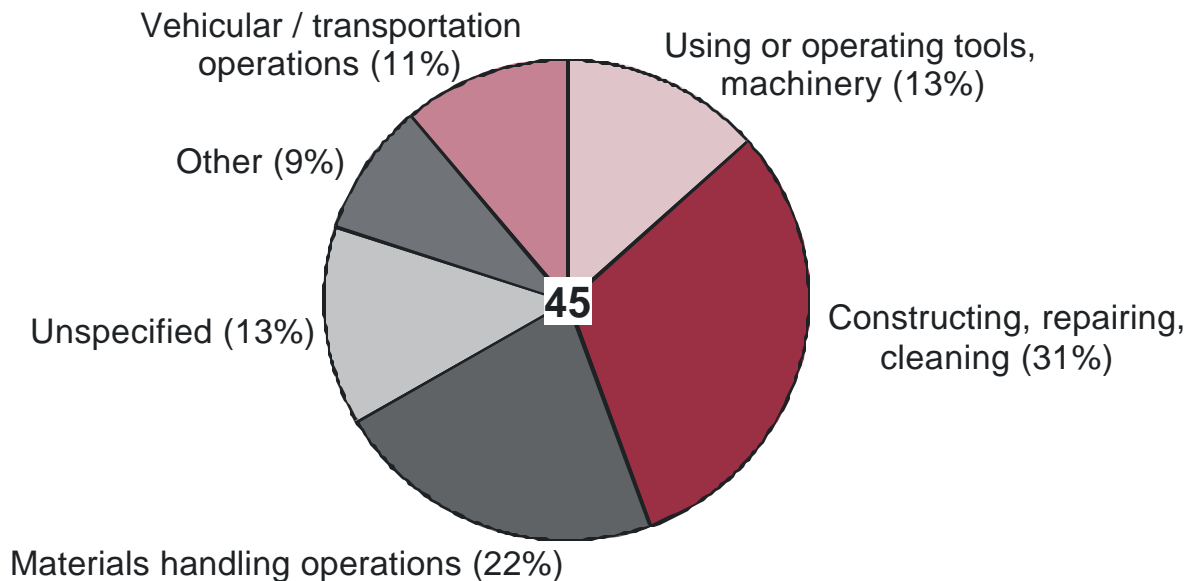


Figure 4C-3.—Nonmetal operators: percent of fatal injuries by work activity, 1986-1995. (Source: MSHA data)

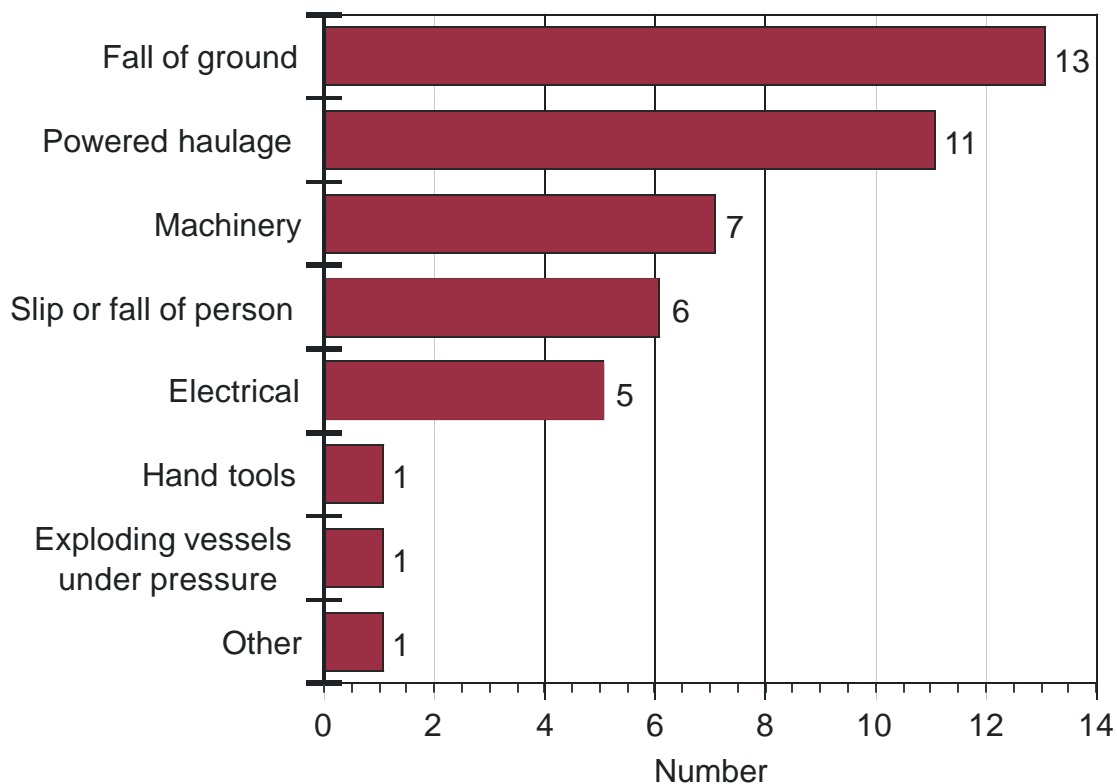


Figure 4C-4.—Nonmetal operators: number of fatal injuries by MSHA accident classification, 1986-1995. (Source: MSHA data)

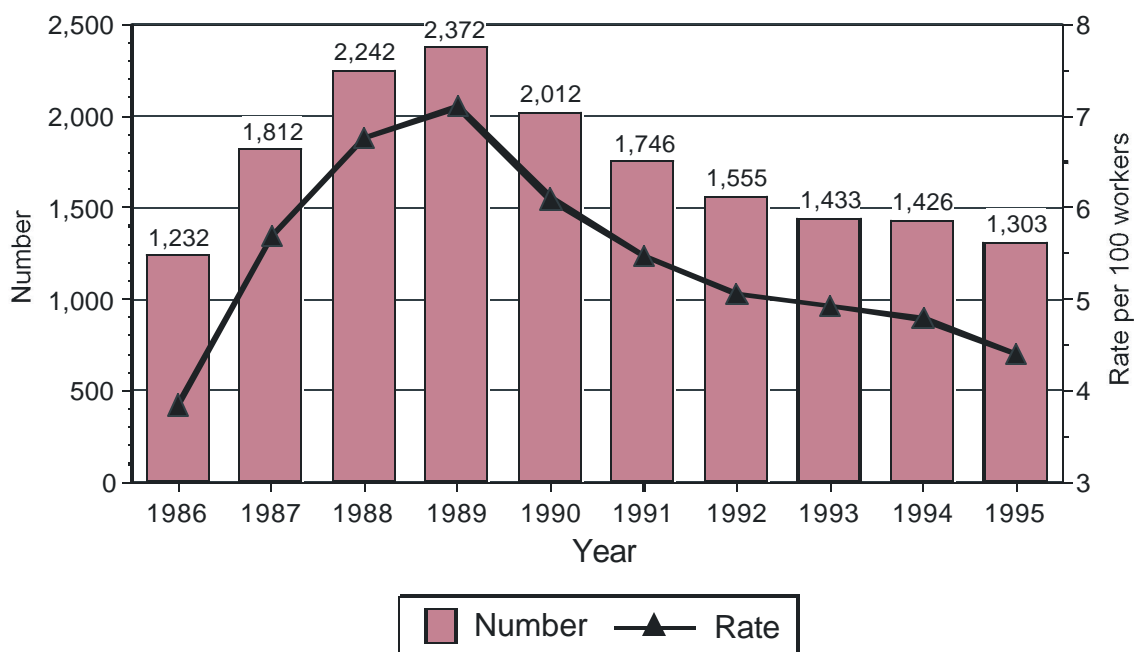


Figure 4C-5.—Nonmetal operators: number and rate (per 100,000 workers) of nonfatal injuries by year, 1986-1995. (Source: MSHA data)

Table 4C-2.—Nonmetal operators: number and average annual rate (per 100 workers) of nonfatal injuries by subunit, 1986-1995.

<u>Mining operation</u>	<u>Number, 1986-1995</u>	<u>Average annual rate per 100 full-time workers</u>
Underground mines:		
Underground operations	2,575	7.31
Surface operations	566	8.83
Surface mines:		
Strip	3,043	5.01
Dredge	68	7.99
Other surface mining	1	*
Independent shops/yards	6	8.57
Mill	10,770	6.37
Office	104	0.24
Total	17,133	5.44

* Rate not calculated because there were fewer than 3 nonfatal injuries

Source: Mine Safety and Health Administration data.

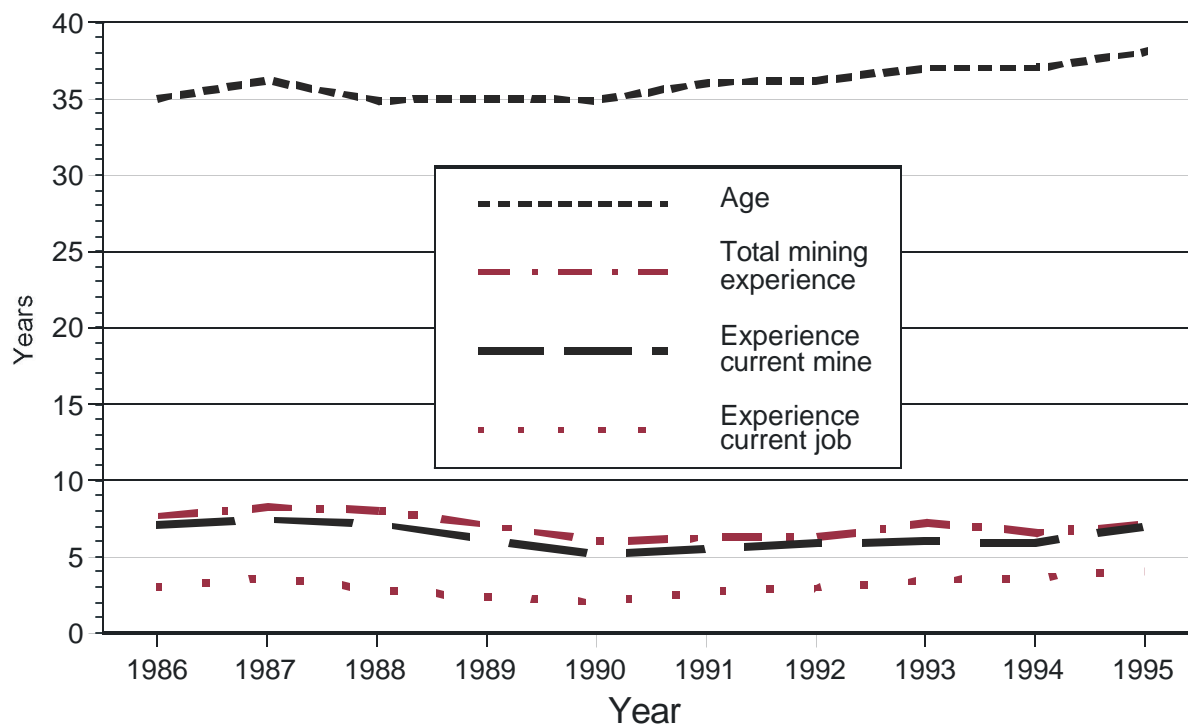


Figure 4C-6.—Nonmetal operators: median values for age, total mining experience, experience in current mine, and experience in current job for workers with nonfatal injuries by year, 1986-1995. (Source: MSHA data)

Table 4C-3.—Nonmetal operators: Nonfatal injuries, 1986-1995, by nature of injury. Number of cases, percentage of cases with one or more lost workdays, mean days lost work per case, total days work lost for all cases, and statutory days charged for all cases.

Nature of injury	Number of cases	Lost workday cases (%)	Mean days lost work	Total days lost	Total statutory days
Sprains and strains	6,191	56.2	17.02	105,359	9,520
Fracture	1,362	44.5	22.55	30,713	7,090
Contusions	1,505	42.3	7.38	11,110	0
Lacerations	3,417	14.6	1.90	6,494	350
Hernia	154	78.6	25.71	3,959	6,250
Burn, heat	409	35.9	8.52	3,485	0
Amputation or enucleation	117	53.8	28.58	3,344	63,242
Crushing	211	36.0	8.86	1,870	1,800
Dislocation	96	46.9	17.65	1,694	0
Joint, tendon, or muscle inflammation or irritation	165	40.0	9.76	1,611	50
Burn, chemical	239	29.3	2.77	663	0
Electric shock	32	56.3	19.41	621	0
Noncontact electric arc burn	142	45.1	3.95	561	0
Abrasions	240	27.5	1.36	327	0
Poisoning	103	31.1	3.10	319	0
Dust in eyes	597	23.6	0.53	318	0
Electrical burn	16	43.8	19.25	308	0
Brain concussion	20	70.0	7.65	153	0
Other specified causes	274	40.5	10.17	2,786	6,300
Multiple injuries, unspecified	1,237	44.1	14.77	18,270	19,090
Other unspecified injuries	606	63.5	19.35	11,729	0

Source: Mine Safety and Health Administration data.

Table 4C-4.—Nonmetal operators: nonfatal injuries, 1986-1995, by work activity. Number of cases, percentage of cases with one or more lost workdays, mean days lost work per case, total days lost for all cases, and statutory days charged for all cases.

Work activity	Number of cases	Lost workday cases (%)	Mean days lost work	Total days lost	Total statutory days
Materials handling	5,972	46.1	12.58	75,098	14,726
Using or operating tools or machinery	3,984	31.5	8.28	32,997	32,325
Constructing, repairing, or cleaning	3,066	36.5	10.34	31,707	44,691
Vehicular and transportation operations	1,748	51.8	16.56	28,952	15,320
Bodily movement	1,821	49.3	14.89	27,116	1,880
Other	391	44.5	15.24	5,958	4,700
Unspecified	151	61.6	25.60	3,866	50
Total	17,133	42.0	12.01	205,894	113,692

Source: Mine Safety and Health Administration data.

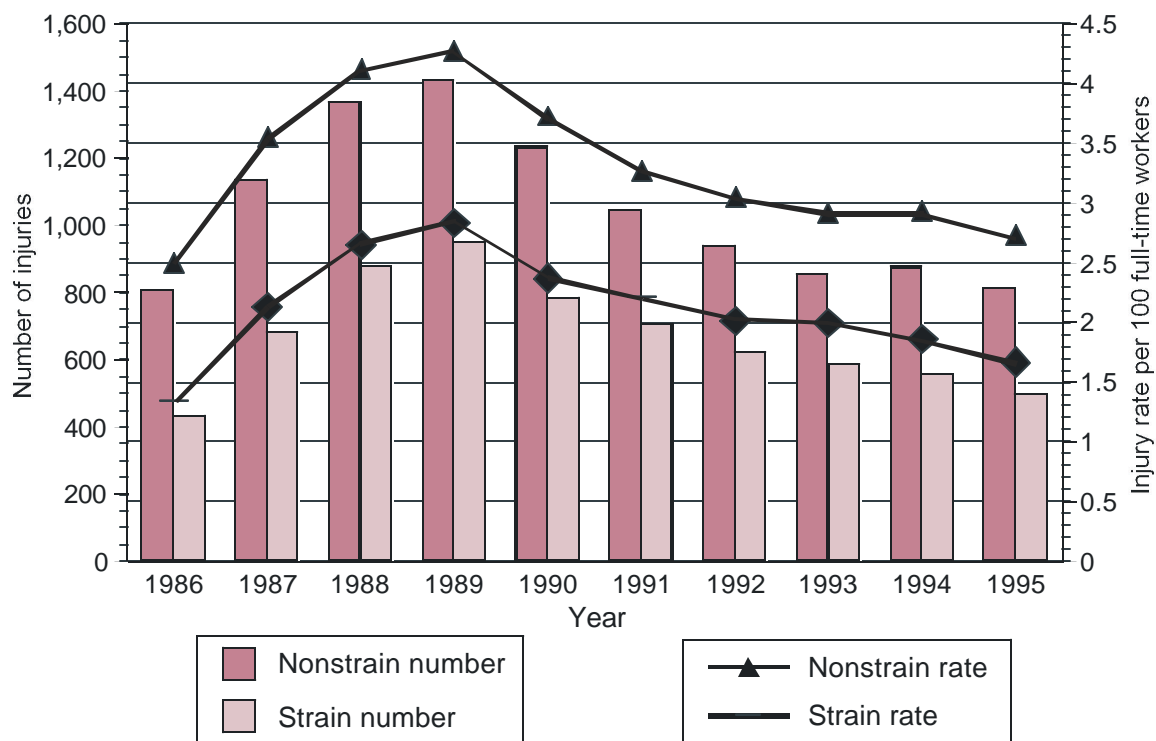


Figure 4C-7.—Nonmetal operators: nonfatal injuries 1986-1995. Number and rate (per 100 workers) of strain and nonstrain injuries by year, 1986-1995. (Source: MSHA data)

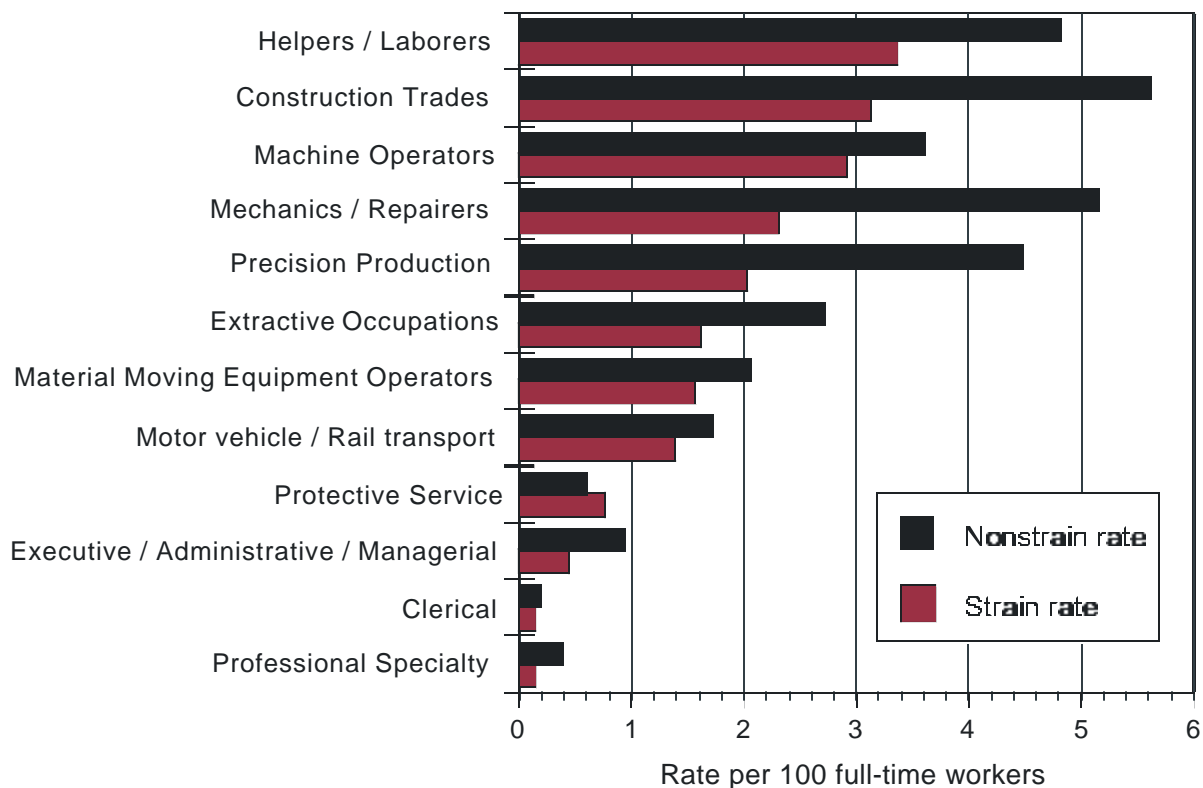


Figure 4C-8.—Nonmetal operators: nonfatal injuries, 1986-1995. Rate (per 100 workers) of strain and nonstrain injuries by U.S. Bureau of the Census Occupation Division, 1986-1995. (Data on occupations were missing for 500 out of 17,133 cases (2.9%).) (Source: MSHA data)

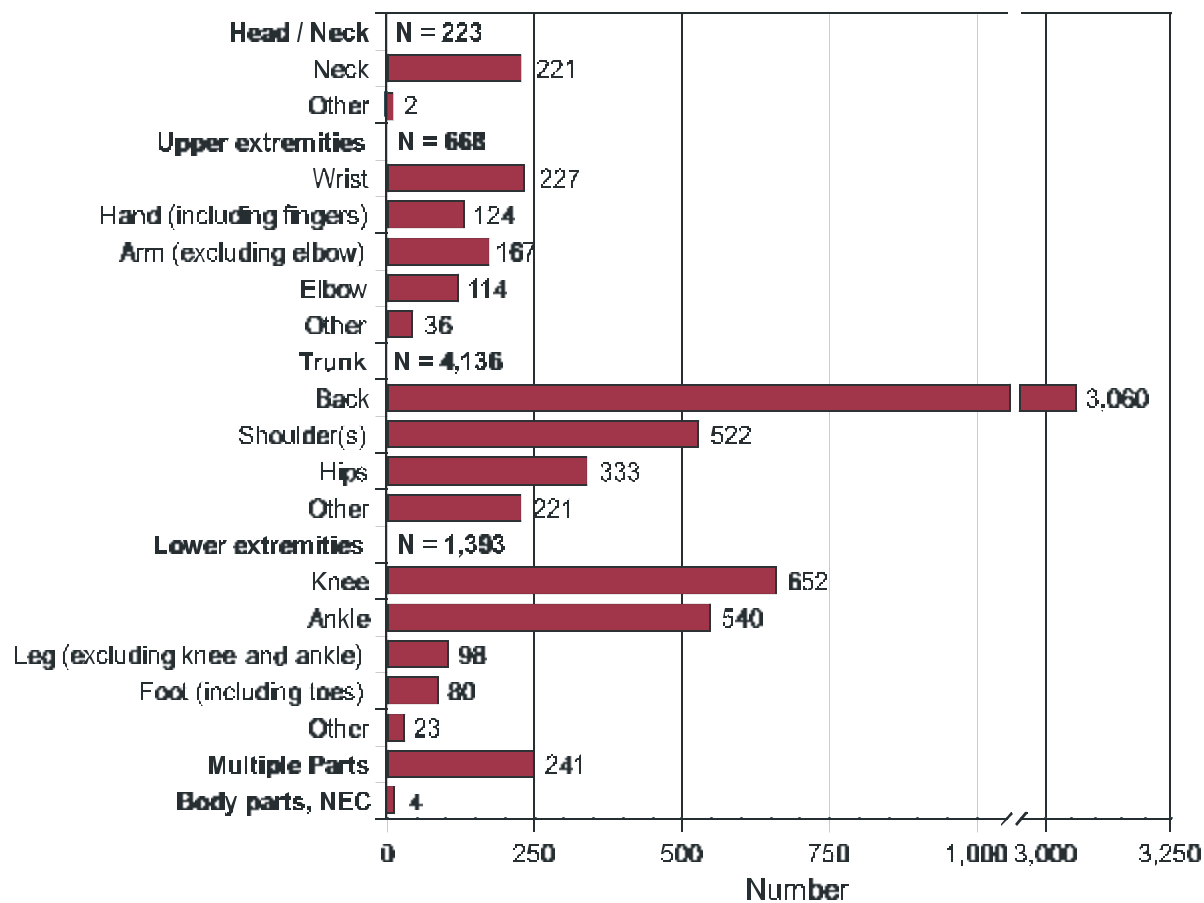


Figure 4C-9.—Nonmetal operators: number of (nonfatal) strain injuries by body part injured, 1986-1995.
(Source: MSHA data)

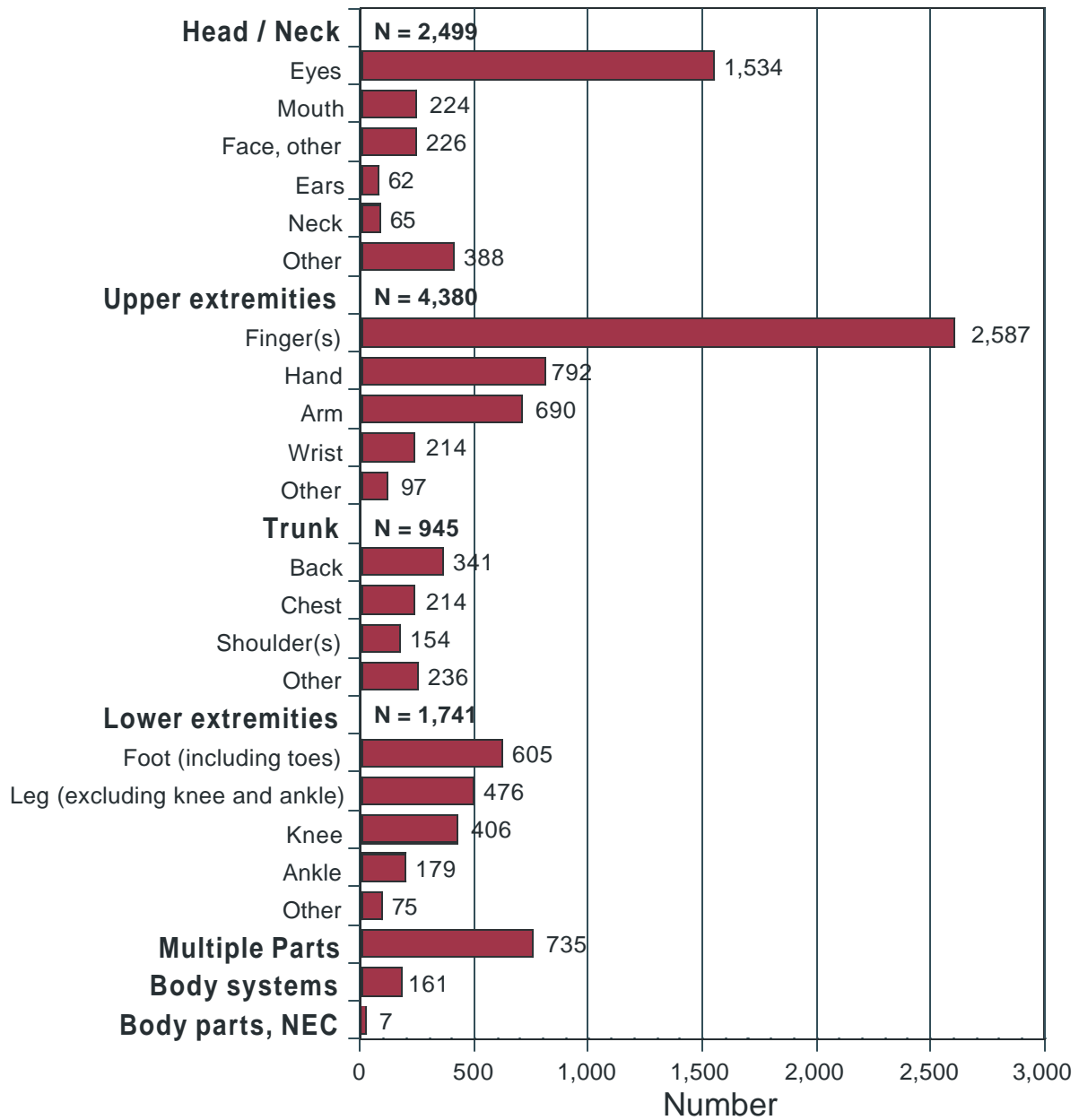


Figure 4C-10.—Nonmetal operators: number of (nonfatal) nonstrain injuries by body part injured, 1986-1995. (Source: MSHA data)

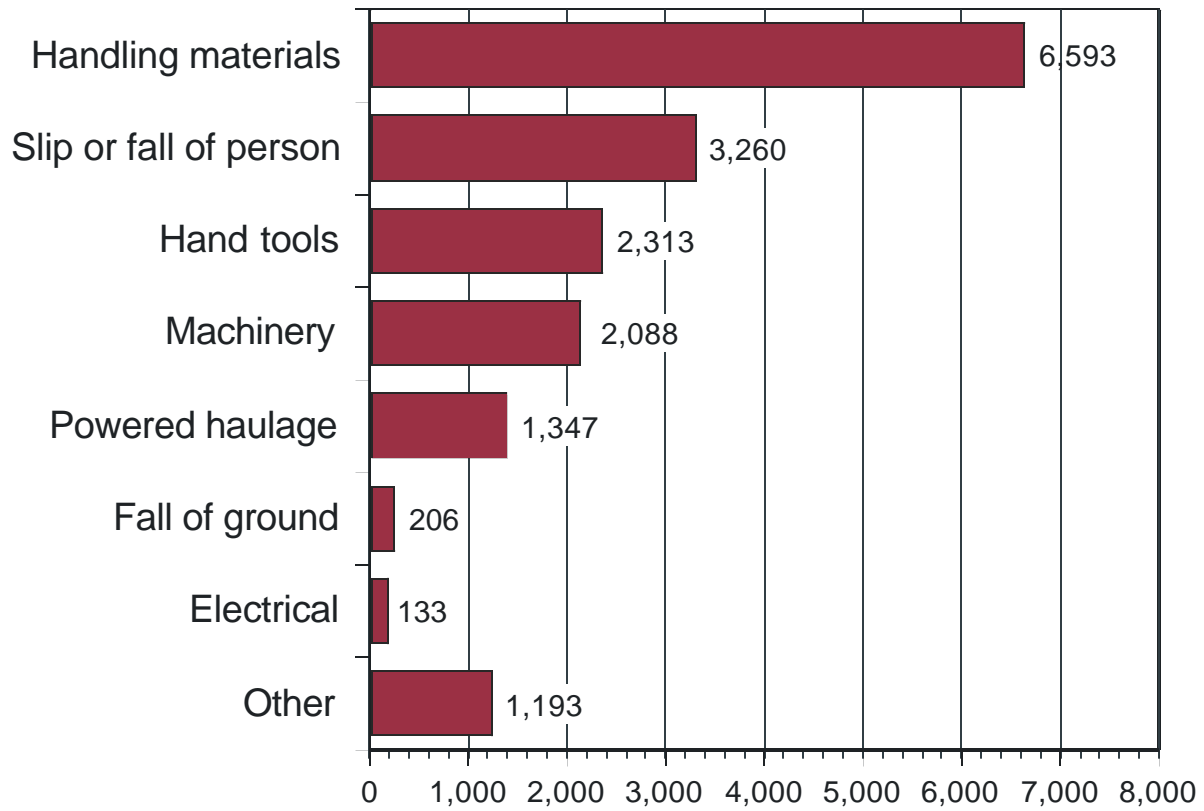


Figure 4C-11.—Nonmetal operators: number of nonfatal injuries by MSHA accident classification, 1986-1995.
(Source: MSHA data)

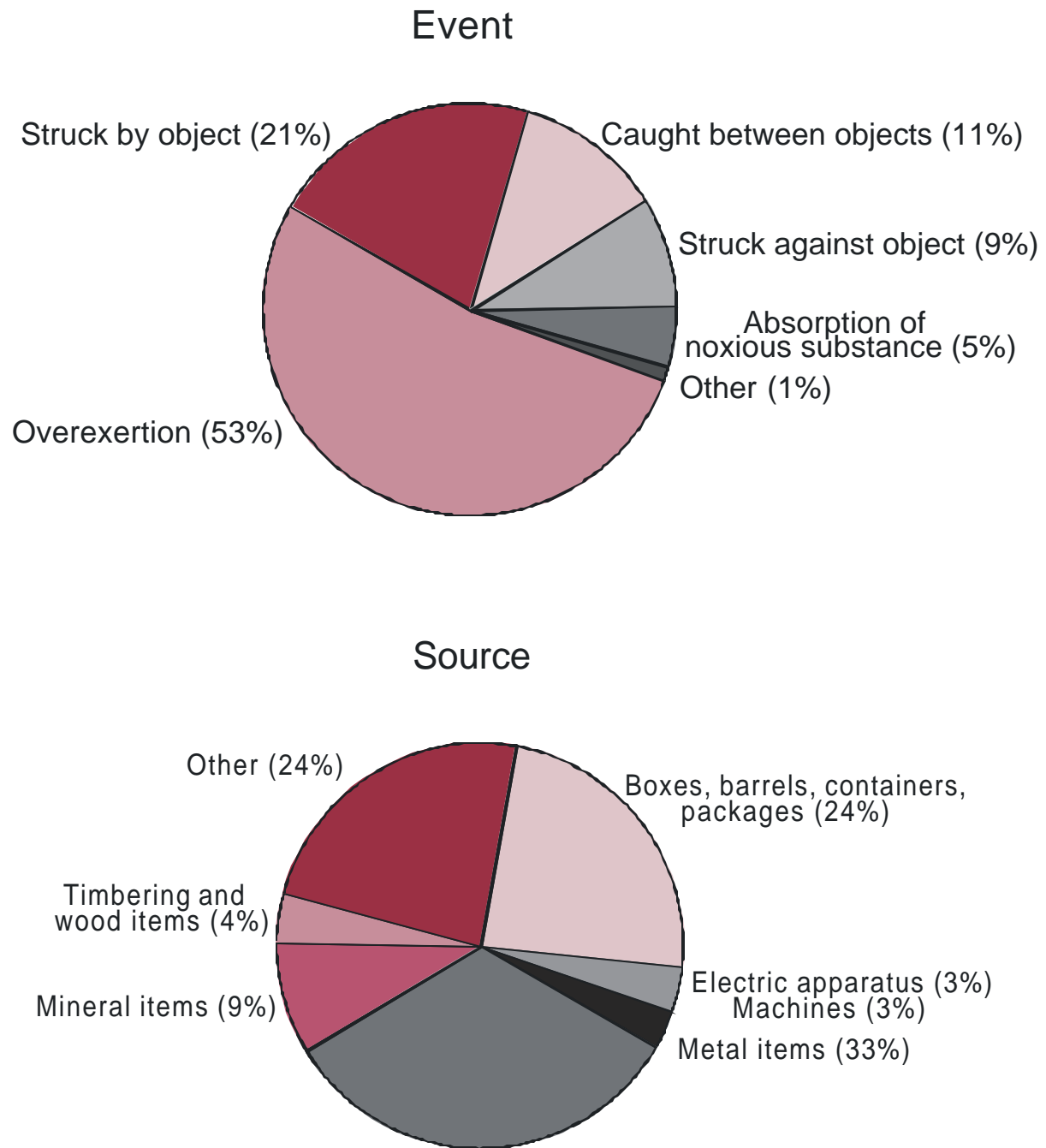


Figure 4C-12.—Nonmetal operators: nonfatal material handling injuries, 1986-1995. Percent of injuries by event resulting in injury and by source of injury (n = 6,593). (Source: MSHA data)

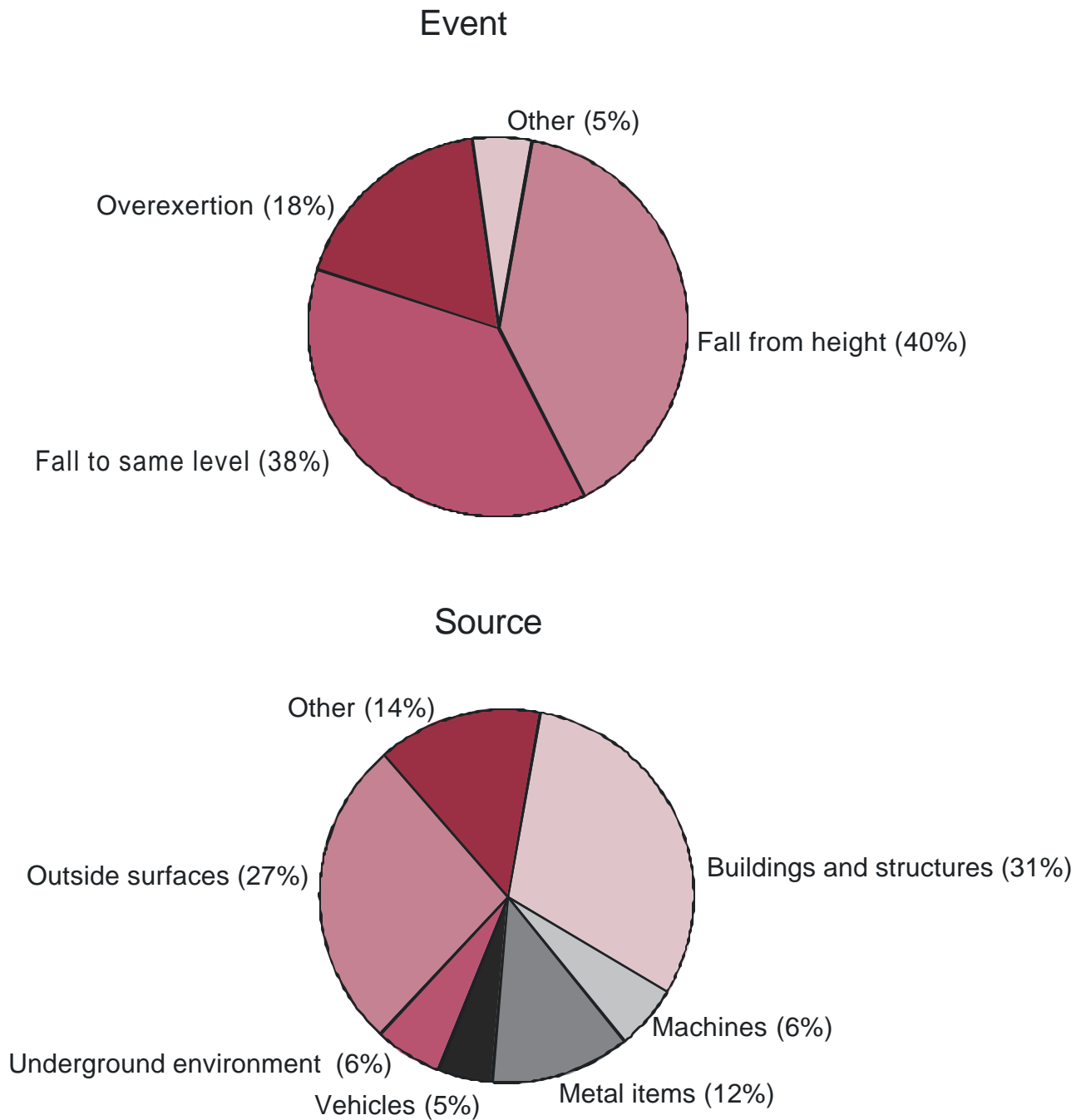


Figure 4C-13.—Nonmetal operators: nonfatal fall injuries, 1986-1995. Percent of injuries by event resulting in injury and by source of injury (n = 3,260). (Source: MSHA data)

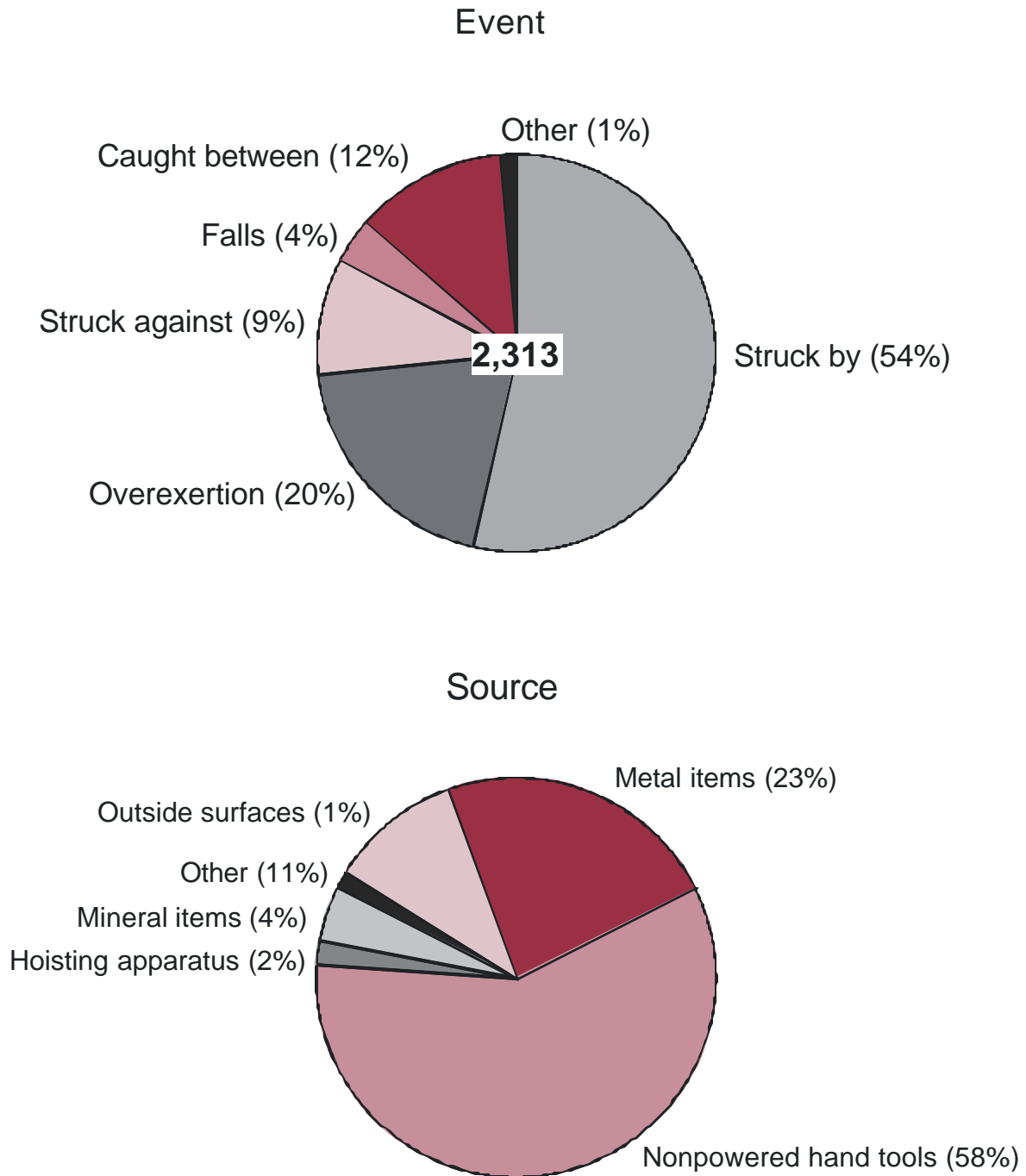


Figure 4C-14.—Nonmetal operators: nonfatal hand tool injuries, 1986-1995. Percent of injuries by event resulting in injury and by source of injury (n = 2,313). (Source: MSHA data)

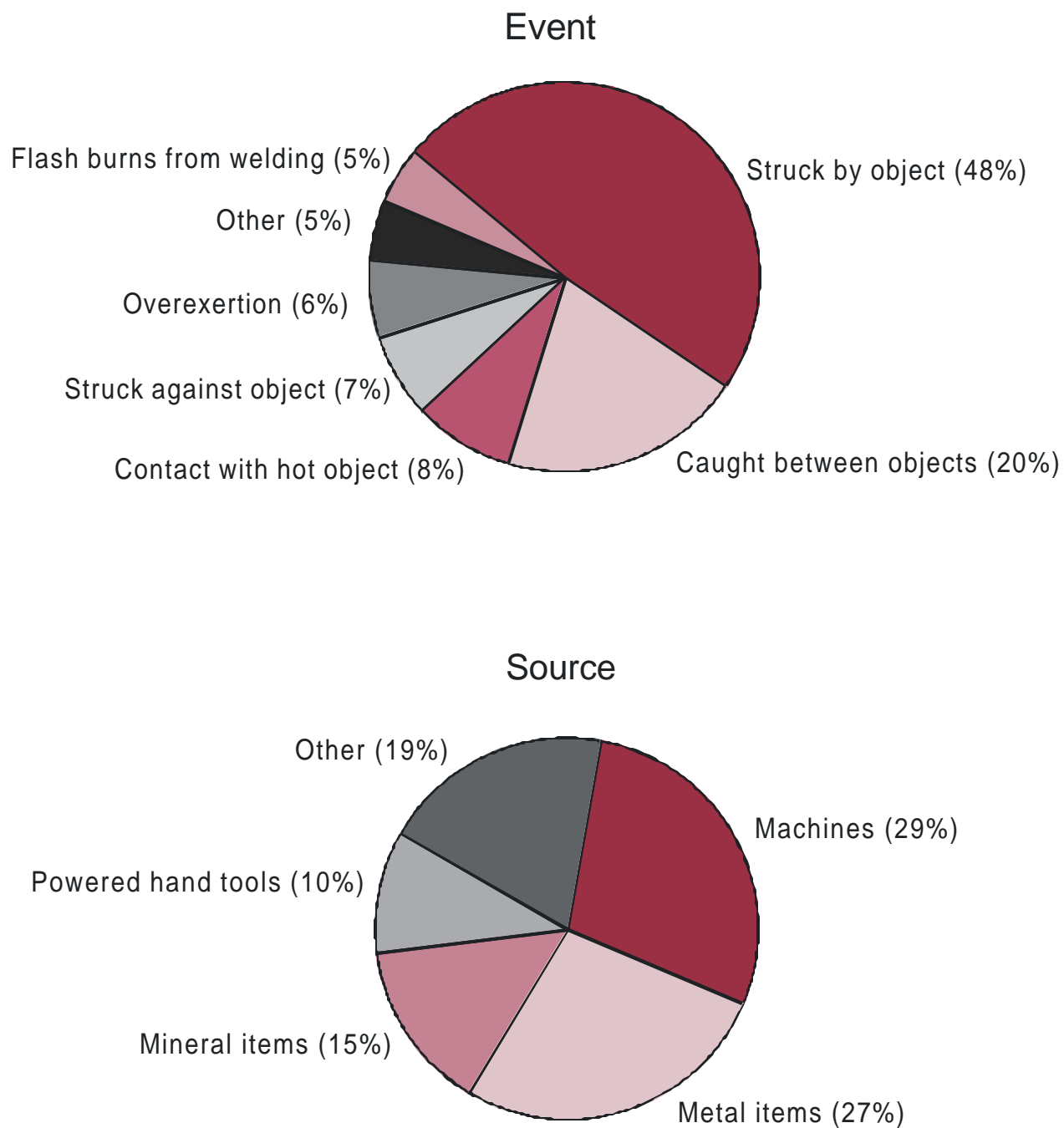


Figure 4C-15.—Nonmetal operators: nonfatal machine injuries, 1986-1995. Percent of injuries by event resulting in injury and by source of injury (n = 2,088). (Source: MSHA data)

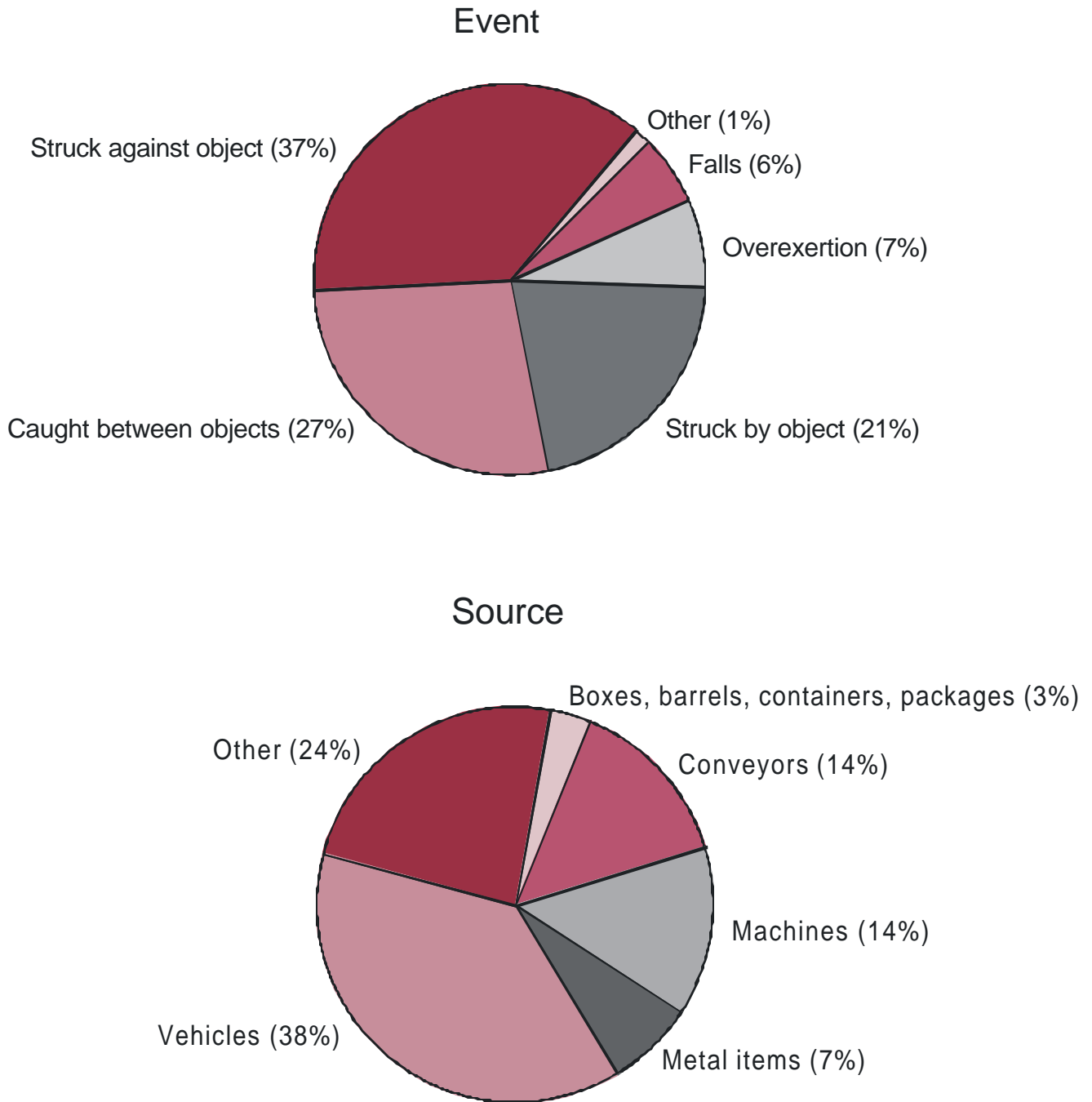


Figure 4C-16.—Nonmetal operators: nonfatal powered haulage injuries, 1986-1995. Percent of injuries by event resulting in injury and by source of injury (n = 1,347). (Source: MSHA data)

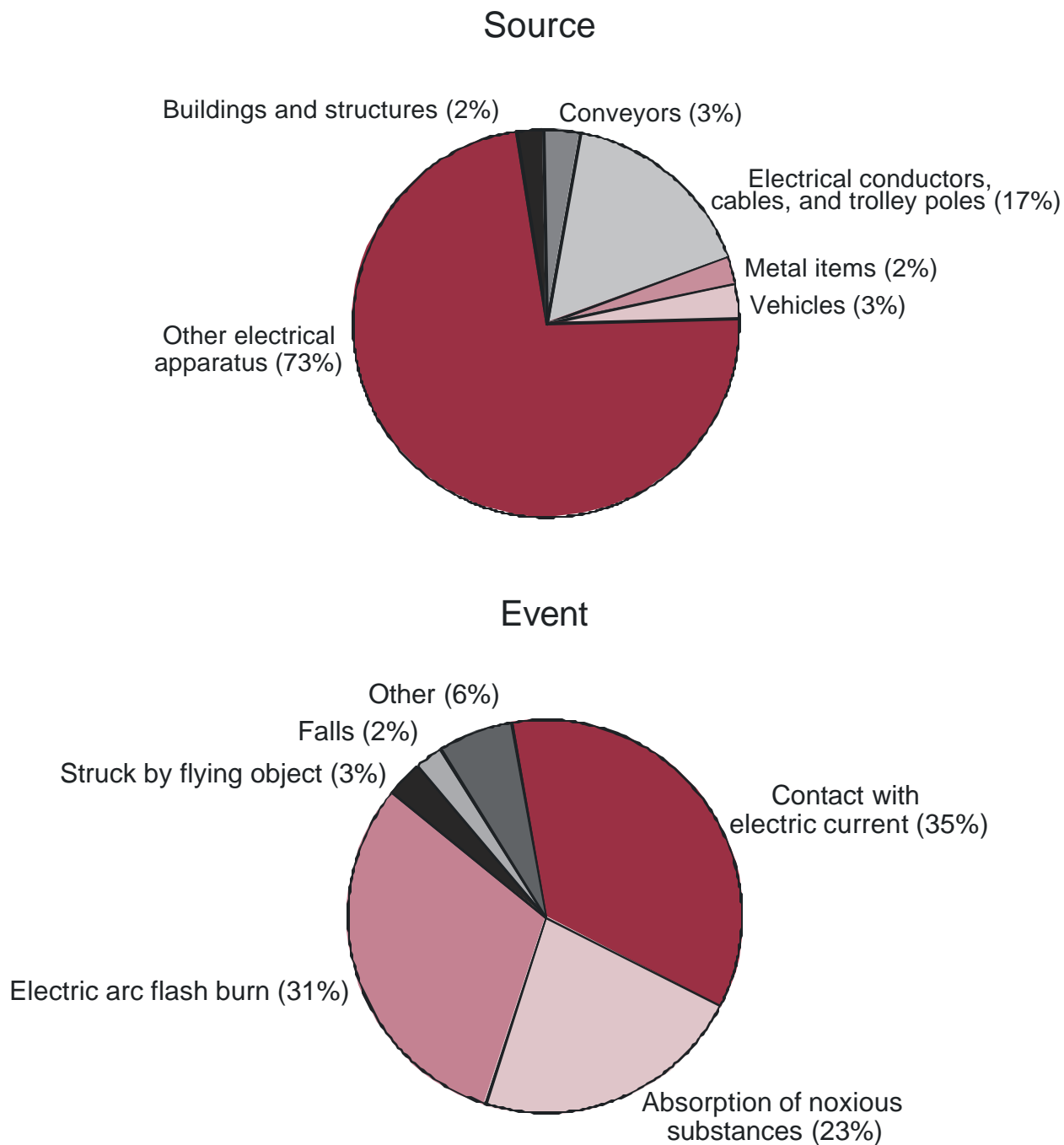


Figure 4C-17.—Nonmetal operators: nonfatal electrical injuries, 1986-1995. Percent of injuries by event resulting in injury and by source of injury (n = 133). (Source: MSHA data)